

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: CORELITE

Report Number: P688523

Luminaire Tested: SQ4R-PH1-125D-940-1-UNV-STD-W-4

Issue Date: 5/22/2023

Test Information

Test Method: LM-79-2019
Report Number: P688523
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2203-586-36)
Test Lab: INNOVATION CENTER
Issue Date: 5/22/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4R-PH1-125D-940-1-UNV-STD-W-4
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH PERCEIVE HEX CONTINUOUS LENS.
1250 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3886.4 lumens
Efficiency: N/A
Efficacy: 78.5 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.22 / 1.28
Luminous Opening: Rectangular (W 0.29' x L: 3.83' x H: 0')
CIE Type: Direct

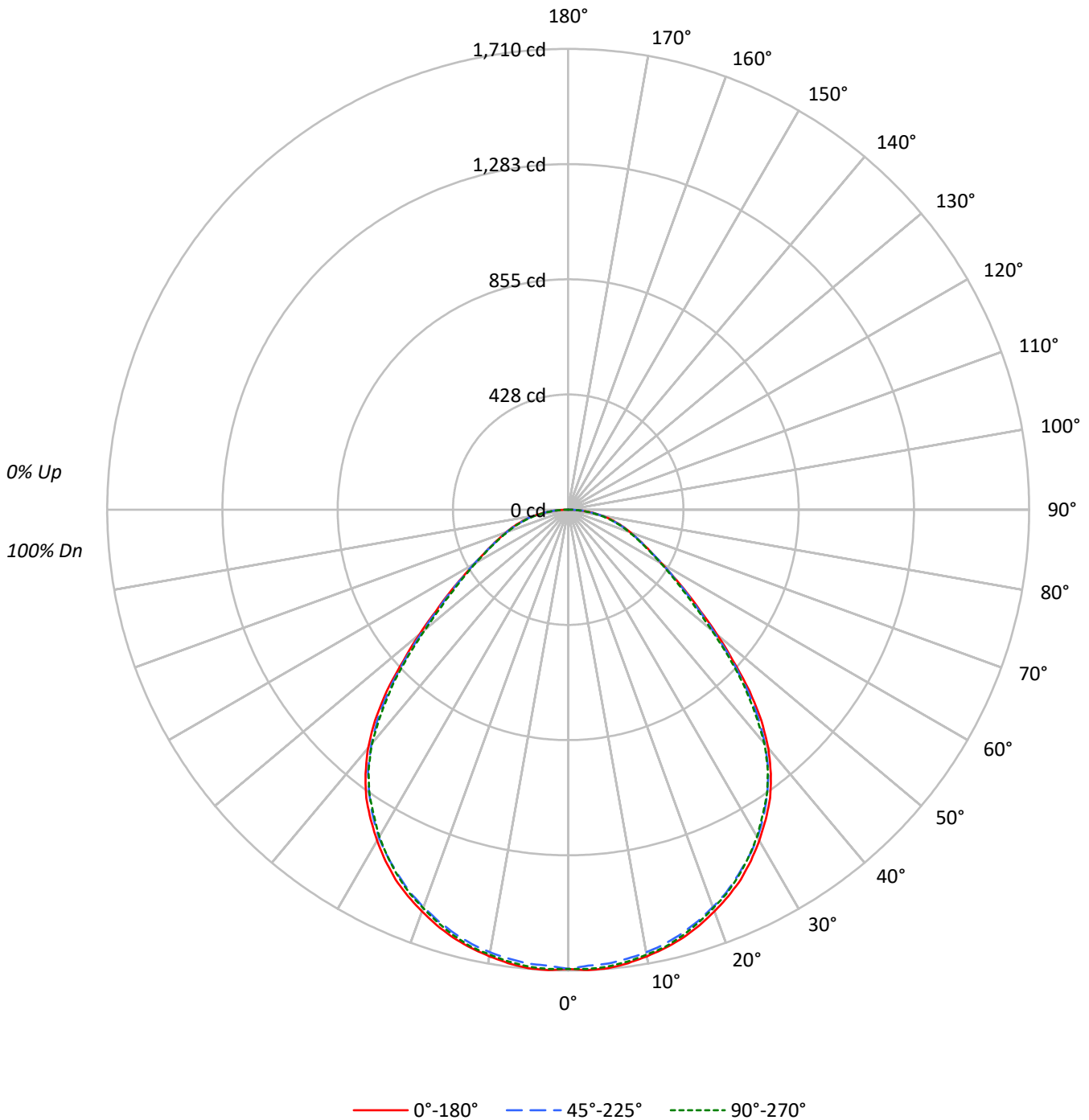
Input Watts (W): 49.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



TEST NUMBER: P688523

CATALOG NUMBER: SQ4R-PH1-125D-940-1-UNV-STD-W-4

Luminous Intensity Polar Plot



TEST NUMBER: P688523

CATALOG NUMBER: SQ4R-PH1-125D-940-1-UNV-STD-W-4

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
RC	80									70									30									10									0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0													
RCR																																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100														
1	110	105	102	98	107	103	100	96	99	96	93	95	93	91	92	90	88	86					86														
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	79	76	74					74														
3	93	83	76	70	90	82	75	69	79	73	68	76	71	67	73	69	66	64					64														
4	86	75	66	60	83	73	66	60	71	64	59	69	63	58	66	62	57	55					55														
5	79	67	59	53	77	66	58	52	64	57	52	62	56	51	60	55	51	49					49														
6	74	61	53	47	72	60	52	46	58	51	46	57	50	46	55	50	45	43					43														
7	68	56	47	42	67	55	47	41	53	46	41	52	46	41	51	45	41	39					39														
8	64	51	43	37	62	50	43	37	49	42	37	48	42	37	47	41	37	35					35														
9	60	47	39	34	58	47	39	34	45	39	34	44	38	34	43	38	33	32					32														
10	56	44	36	31	55	43	36	31	42	35	31	41	35	31	40	35	31	29					29														

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16403	16403	16403
5°	16506	16343	16444
10°	16450	16306	16388
15°	16395	16226	16310
20°	16249	16076	16119
25°	16087	15864	15908
30°	15760	15620	15573
35°	15352	15129	15105
40°	14513	14274	14221
45°	12944	12687	12544
50°	10806	10585	10364
55°	9003	8898	8684
60°	7735	7777	7613
65°	7091	7044	6948
70°	6868	6809	6691
75°	6963	6807	6651
80°	6997	6880	6647
85°	6738	6738	6274

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 12944 cd/sqm

TEST NUMBER: P688523

CATALOG NUMBER: SQ4R-PH1-125D-940-1-UNV-STD-W-4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	161.6	4.2
10°-20°	461.6	11.9
20°-30°	691.6	17.8
30°-40°	804.7	20.7
40°-50°	715.7	18.4
50°-60°	480.6	12.4
60°-70°	310.6	8.0
70°-80°	193.6	5.0
80°-90°	66.3	1.7
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1314.8	33.8
0°-40°	2119.5	54.5
0°-60°	3315.8	85.3
0°-90°	3886.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3886.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1704	1704	1704	1704	1704	
5°	1708	1704	1691	1704	1702	162
15°	1645	1641	1628	1638	1636	464
25°	1514	1508	1493	1502	1498	696
35°	1306	1300	1287	1287	1285	812
45°	951	946	932	919	921	727
55°	536	536	530	522	517	486
65°	311	313	309	307	305	312
75°	187	185	183	183	179	197
85°	61	63	61	59	57	68
90°	0	0	0	0	0	

TEST NUMBER: P688523

CATALOG NUMBER: SQ4R-PH1-125D-940-1-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1703.8	1703.8	1703.8	1703.8	1703.8
2.5°	1710.1	1705.9	1693.2	1708.0	1705.9
5°	1708.0	1703.8	1691.1	1703.8	1701.6
7.5°	1697.4	1695.3	1680.6	1695.3	1691.1
10°	1682.7	1682.7	1668.0	1680.6	1676.4
12.5°	1665.9	1663.8	1651.2	1663.8	1661.7
15°	1644.9	1640.7	1628.0	1638.5	1636.4
17.5°	1617.5	1615.4	1600.7	1611.2	1607.0
20°	1586.0	1581.8	1569.1	1577.5	1573.3
22.5°	1552.3	1548.1	1535.5	1541.8	1539.7
25°	1514.4	1508.1	1493.4	1501.8	1497.6
27.5°	1468.2	1466.1	1451.3	1455.6	1451.3
30°	1417.7	1415.6	1405.1	1405.1	1400.9
32.5°	1363.0	1365.1	1348.3	1350.4	1342.0
35°	1306.2	1299.9	1287.3	1287.3	1285.2
37.5°	1234.7	1230.5	1220.0	1217.9	1215.8
40°	1154.8	1150.6	1135.8	1131.6	1131.6
42.5°	1060.1	1055.9	1041.2	1034.9	1026.5
45°	950.7	946.5	931.8	919.2	921.3
47.5°	828.7	832.9	818.2	807.7	805.6
50°	721.5	719.4	706.7	700.4	692.0
52.5°	618.4	620.5	610.0	605.8	595.3
55°	536.4	536.4	530.1	521.6	517.4
57.5°	462.7	467.0	460.6	456.4	452.2
60°	401.7	403.9	403.9	395.4	395.4
62.5°	351.3	353.4	351.3	347.1	347.1
65°	311.3	313.4	309.2	307.1	305.0
67.5°	275.5	277.6	275.5	273.4	269.2
70°	244.0	244.0	241.9	241.9	237.7
72.5°	216.7	214.5	212.4	212.4	210.3
75°	187.2	185.1	183.0	183.0	178.8
77.5°	157.8	155.7	155.7	151.4	149.3
80°	126.2	126.2	124.1	122.0	119.9
82.5°	96.8	94.7	92.5	90.4	88.3
85°	61.0	63.1	61.0	58.9	56.8
87.5°	27.3	29.4	29.4	29.4	27.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)